

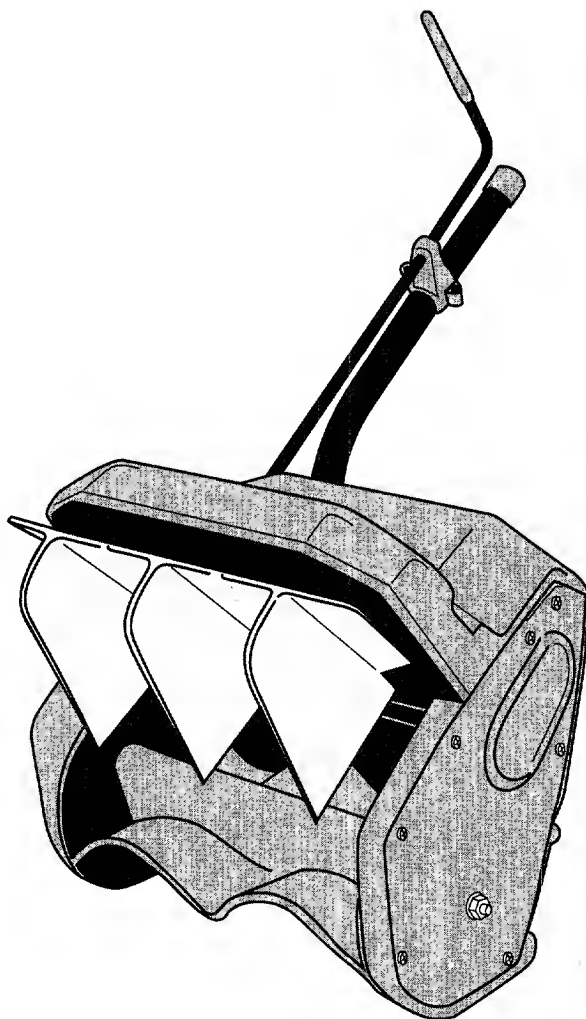
Plus

Snow Thrower



ST720r

OPERATOR'S MANUAL



FOR QUESTIONS, CALL 1-800-345-8746 in U.S. or
1-800-668-1238 in CANADA
www.TrimmerPlus.com

IMPORTANT MANUAL

DO NOT THROW AWAY

INTRODUCTION

THANK YOU

Thank you for buying this quality product. This modern outdoor power tool will provide many hours of useful service. You will find it to be a great labor-saving device. This operator's manual provides you with easy-to-understand operating instructions. Read the whole manual and follow all the instructions to keep your new outdoor power tool in top operating condition.

PRODUCT REFERENCES, ILLUSTRATIONS, AND SPECIFICATIONS

All information, illustrations, and specifications in this manual are based on the latest product information available at the time of printing. We reserve the right to make changes at any time without notice.

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All Rights Reserved.

TrimmerPlus® is a registered trademark of
MTD SOUTHWEST INC

SERVICE INFORMATION

Service on this unit both within and after the warranty period should be performed only by an authorized and approved service dealer.

Dial:

1-800-345-8746 in the United States or
1-800-668-1238 in Canada

to obtain the listing of the authorized service dealer nearest you.

DO NOT RETURN THE UNIT TO THE RETAILER.

**NOTE: PROOF OF PURCHASE WILL BE
REQUIRED FOR WARRANTY SERVICE.**

Make sure this manual is carefully read and understood before starting or operating this equipment.

THIS PRODUCT IS COVERED BY ONE OR
MORE U.S. PATENTS.
OTHER PATENTS PENDING.

A complete parts list can be viewed and printed by going to our web site, **www.TrimmerPlus.com**.
Or,
you can request a copy by calling **1-800-345-TRIM**
(1-800-345-8746). Please have the unit model and serial number when calling.

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CONTENTS OF CARTON

This unit should consist of the following:

- ST720r Snow Thrower Add-On
- Hanger
- Operator's Manual
- Product Registration Card

NOTE: This product has been rated for use on both gas and electric powerheads.

RULES FOR SAFE OPERATION

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and their explanations, deserve your careful attention and understanding. The safety warnings do not, by themselves, eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

SYMBOL MEANING



SAFETY ALERT SYMBOL: Indicates danger, warning, or caution. Attention is required in order to avoid serious personal injury. May be used in conjunction with other symbols or pictographs.

NOTE: Advises you of information or instructions vital to the operation or maintenance of the equipment.



DANGER: Failure to obey a safety warning will result in serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock, and personal injury.



WARNING: Failure to obey a safety warning can result in injury to yourself and others. Always follow the safety precautions to reduce the risk of fire, electric shock, and personal injury.



CAUTION: Failure to obey a safety warning may result in property damage or personal injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock, and personal injury.

• IMPORTANT SAFETY INFORMATION •

READ ALL INSTRUCTIONS



WARNING: When using the unit, the safety rules must be followed. For your own safety and that of bystanders, please read these instructions before operating the unit. Please keep the instructions safe for later use.



WARNING: To prevent electric shock, use only with an extension cord suitable for outdoor use.

BEFORE OPERATING:

- Carefully read and understand the operator's manual of the unit that powers this attachment.
- Read this operating instruction manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment. Know how to stop the unit and disengage the controls quickly.
- Never allow children to operate the equipment. Never allow adults unfamiliar with the instructions to use the unit. Never allow adults to operate the equipment without proper instruction.
- Children and teens under the age of 15 must not use the unit, except for teens guided by an adult.
- Keep bystanders, especially children and pets, at least 50 ft (15 m) away.
- Exercise caution to avoid slipping or falling, especially when operating in reverse.
- Thoroughly inspect the area where the snow thrower is to be used. Remove all doormats, sleds, boards, wires, debris, and other foreign objects which may be thrown by the snow thrower.
- Disengage all clutches and shift into neutral before starting the powerhead.

- Do not operate the unit while under the influence of drugs, alcohol, or medication.
- Inspect the unit before use. Replace damaged parts. Make sure all fasteners are in place and secure. Replace snow thrower parts that are cracked, chipped, or damaged in any way. Make sure the snow throwing unit is properly installed and securely fastened.
- Make sure the rotor will spin freely before attaching the snow thrower to the powerhead.
- Dress properly. Wear adequate winter outer garments. Wear heavy, long pants, boots, gloves and a long sleeve shirt. Do not wear loose clothing, jewelry, short pants, sandals or go barefoot. Secure hair above shoulder level.
- Wear footwear that doesn't leak when operating the snow thrower and that will improve footing on slippery surfaces.
- Never attempt to make adjustments while the powerhead is running (except when specifically recommended by the manufacturer.)
- Let powerhead and machine adjust to outdoor temperatures before starting to clear snow.
- Always wear safety glasses/shields or goggles at all times during operation or while performing an adjustment or repair to protect eyes from foreign objects that may be thrown from the machine.

WHILE OPERATING:

- Stay away from the discharge opening at all times. Keep face, hands, and feet away from concealed moving or rotating parts.
- Be attentive when using the snow thrower, and stay alert for holes in the terrain and other hidden hazards or traffic.
- Do not use on a gravel surface or crushed rock surfaces. Use extreme caution when crossing gravel/crushed rock drives, walks, or roads.

RULES FOR SAFE OPERATION

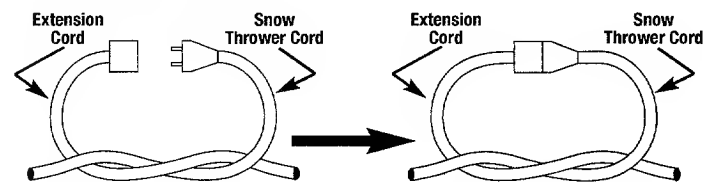
- After striking a foreign object, turn the powerhead off and inspect the snow thrower for damage. For gas powerheads: Remove wire from the spark plug. For electric powerheads: Disconnect the cord. Repair damage before restarting and operating the unit.
- If the unit should start to vibrate abnormally, stop the powerhead and check immediately for the cause. Vibration is generally a warning of trouble.
- Stop the powerhead whenever you leave the operating position, before unclogging the rotor or discharge vanes, and when making any repairs, adjustments, or inspections.
- Clear snow from slopes by going up and down. Never go across the slope. Use caution when changing directions. Never clear snow from steep slopes.
- Never attempt to use the snow thrower on a roof or any steep, inclined, slippery surfaces.
- Never operate snow thrower without proper guards, plates or other safety protective devices in place.
- Never operate the snow thrower near glass enclosures, automobiles, trucks, window wells, dropoffs, etc. without proper adjustment of the snow discharge angle. Keep children and pets away.
- Don't force or overload the snow thrower. Snow thrower will perform at its best and safest when run at the rate for which it was designed.
- Never operate the machine at high transport speeds on slippery surfaces. Look behind and use care when backing.
- Never direct discharge towards people or allow anyone in front of the unit while operating.
- Disengage power to the rotor when snow thrower is transported or not in use.
- Make sure the rotor will spin freely before attaching the snow thrower to the powerhead.
- If the rotor will not rotate freely due to frozen ice, thaw the unit thoroughly before attempting to operate it under power.
- Keep the rotor clear of debris.
- Do not overreach. Keep proper footing and balance at all times.
- Never discharge snow onto public roads or near moving traffic.
- Let snow thrower run for a few minutes after clearing snow so moving parts do not freeze.
- Never operate without good visibility or light. Always be sure of your footing and keep a firm hold on the handles. Walk; never run.

AFTER OPERATING:

- Follow instructions for care, maintenance, and storage of snow thrower.
- Only qualified personnel should perform any repairs or maintenance procedures that are not described in this manual.
- Remove residue ice or snow from the vanes and rotor by briefly running the unit out of snow.
- Store snow thrower indoors in a dry, locked place. Keep out of the reach of children.
- Always refer to the operator's guide instructions for important details if snow thrower is to be stored for an extended period.
- Use only attachments and accessories approved by the manufacturer of the snow thrower.

SPECIAL SAFETY WARNINGS FOR ELECTRIC POWERHEADS AND SNOW THROWERS

- When cleaning, inspecting, or repairing, make certain the rotor and all moving parts have stopped. Disconnect the extension cord to prevent accidental starting.
- Use extension cords and receptacles as specified by the manufacturer for all units with electric drive motors or electric starting motors.
- Use only 3-wire outdoor extension cords that have 3-prong grounding-type plugs and 3-pole receptacles that accept the snow thrower's plug. Replace or repair damaged cords.
- Do not abuse extension cord. Never carry snow thrower by the cord or yank on the cord to disconnect it from the receptacle.
- Keep the extension cord away from heat, oil, and sharp edges to prevent damage.
- If extension cord is damaged in any manner while plugged in, pull extension cord from receptacle.
- Prevent disconnection of snow thrower powerhead from extension cord during operation by using a plug-receptacle retaining strap, connector, or by making a knot as shown below:



- Do not use in rain or during a snowfall. Do not use in or around water.
- Avoid accidental starting. Don't carry plugged-in snow thrower with finger on switch.

RULES FOR SAFE OPERATION

- Always unplug the unit and allow it to cool before putting it into storage. Store indoors.
- Always unplug the unit when not in use, and before performing any maintenance or repairs.

SPECIAL SAFETY WARNINGS FOR GAS POWERHEADS AND SNOW THROWERS







- When cleaning, inspecting, or repairing, make certain the rotor and all moving parts have stopped. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
- Handle fuel with care; it is highly flammable.
- Use an approved fuel container for mixing fuel. Avoid spilling the fuel when mixing with the oil.
- Fill fuel tank of the power unit with extreme care in a well-ventilated, area outdoors. Never fill fuel tank indoors. Do not smoke while fueling the power unit.

- Never add fuel to a running engine or hot engine.
- After filling fuel tank, replace gasoline cap securely and wipe up any spilled fuel. Move away from the fueling area before starting the unit.
- Do not run the engine indoors, except when starting the engine and for transporting the snow thrower in or out of the building. Open the outside doors; exhaust fumes are dangerous.
- Do not smoke while operating the unit.
- Refuel and store in an area free of potential fuel vapor ignition sources such as open flames (pilot lights) or electrical sparking devices (switches, electric motors).
- Turn off the engine and let it cool before refueling or before putting the unit in storage.

SAVE THESE INSTRUCTIONS

SAFETY AND INTERNATIONAL SYMBOLS

This operator's manual describes safety and international symbols and pictographs that may appear on this product. Read the operator's manual for complete safety, assembly, operating, maintenance and repair information.

SYMBOL	MEANING
	<ul style="list-style-type: none"> • SAFETY ALERT SYMBOL Indicates danger, warning, or caution. May be used in conjunction with other symbols or pictographs.
	<ul style="list-style-type: none"> • WARNING - READ OPERATOR'S MANUAL Read the Operator's Manual(s) and follow all warnings and safety instructions. Failure to do so can result in serious injury to the operator and/or bystanders.
	<ul style="list-style-type: none"> • WEAR EYE AND HEARING PROTECTION WARNING: The operation of any power tool can be the source of thrown objects and loud noise which can cause severe eye injury and hearing loss. Always wear safety glasses or goggles eye protection meeting ANSI Z87.1 standards and ear protection when operating this unit. Use a full face shield when needed.
	<ul style="list-style-type: none"> • KEEP BYSTANDERS AWAY WARNING: Keep all bystanders, especially children and pets, at least 50 feet (15 m) from the operating area.
	<ul style="list-style-type: none"> • SPINNING ROTOR CAN CAUSE SEVERE INJURY. WARNING: Keep hands, feet, and clothing away from the discharge area. Do not step in front of the unit, or use hands to clean the rotor area.
	<ul style="list-style-type: none"> • THROWN OBJECTS CAN CAUSE SEVERE INJURY. WARNING: Small objects can be propelled at high speed, causing injury.

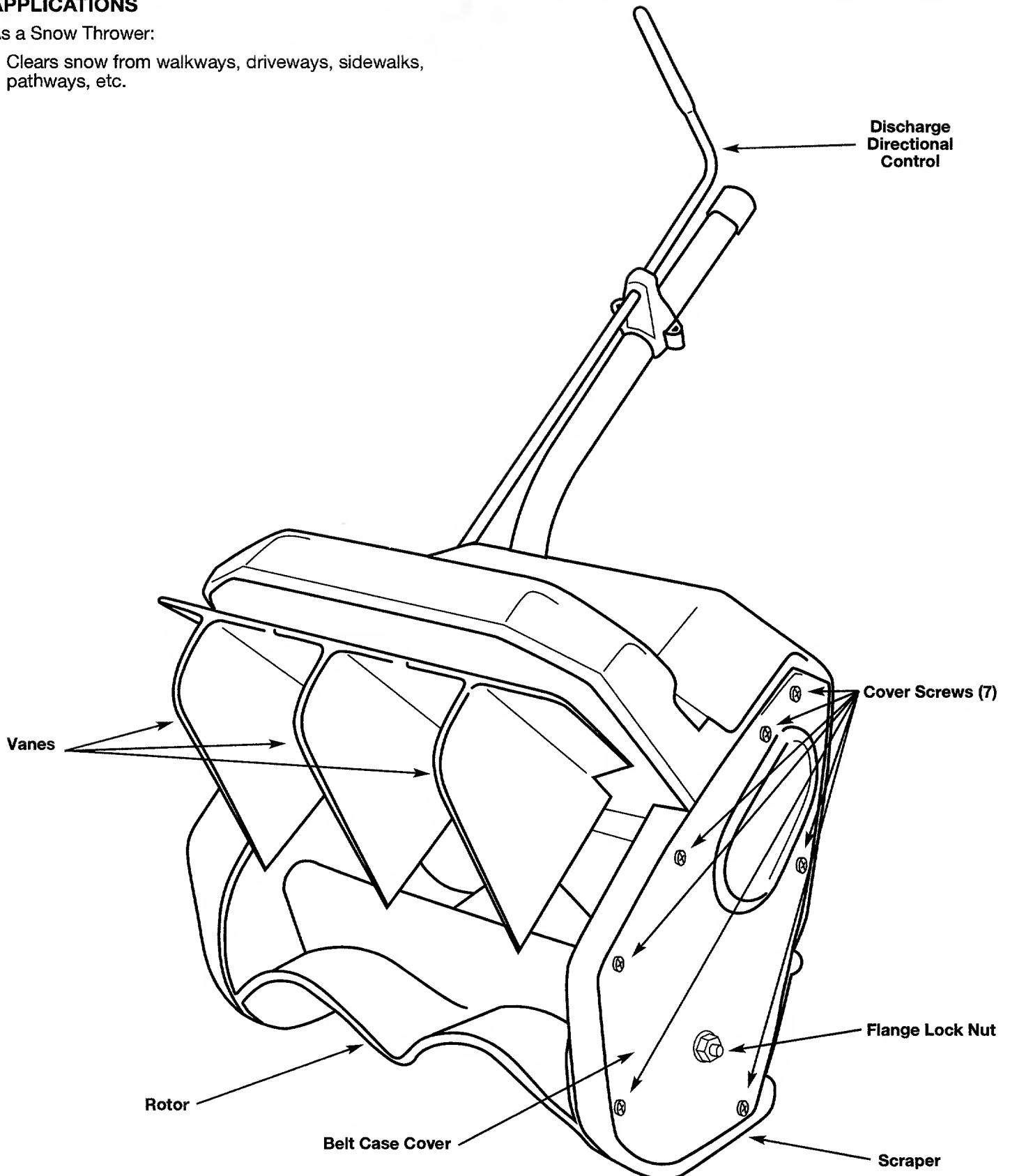
RULES FOR SAFE OPERATION

KNOW YOUR UNIT

APPLICATIONS

As a Snow Thrower:

- Clears snow from walkways, driveways, sidewalks, pathways, etc.



OPERATING INSTRUCTIONS

ASSEMBLING THE COUPLER

The TrimmerPlus® system enables the use of these optional add-ons.

Blower/Vacuum	BV720r
Cultivator	GC720r
Edger	LE720r
Hedge Trimmer	HS720r
Straight Shaft Trimmer	SS725r
Sweeper/Blower	SB720r
Tree Pruner	TP720r
Turbo Blower	TB720r



WARNING: Read and understand operator's manual for add-on prior to operation.

Removing the add-on:

1. Turn the knob counterclockwise to loosen (Fig. 1).
2. Press and hold the release button (Fig. 1).
3. While firmly holding the upper shaft housing, pull the snow thrower attachment out of the coupler (Fig. 2).

Installing the add-on:



WARNING: To avoid serious personal injury and damage to the unit, shut unit off before removing or installing add-ons.

NOTE: To make installing or removing the add-on easier, place the unit on the ground or on a work bench.

1. Turn knob counterclockwise to loosen (Fig. 1).

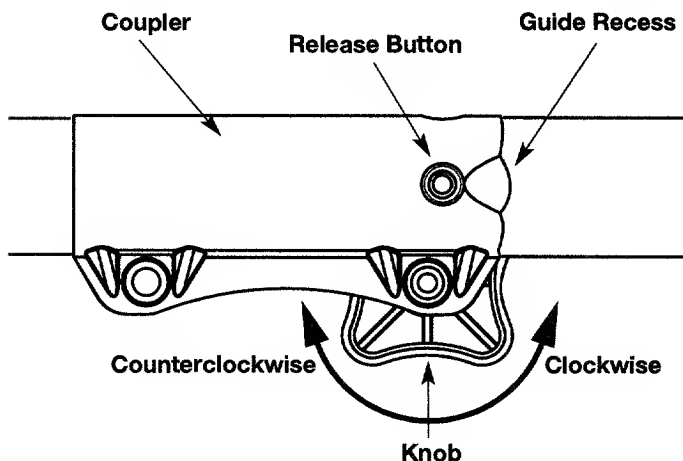


Fig. 1

2. While firmly holding the add-on, push it straight into the coupler (Fig. 2).

NOTE: Aligning the release button with the guide recess will help installation (Fig. 1).

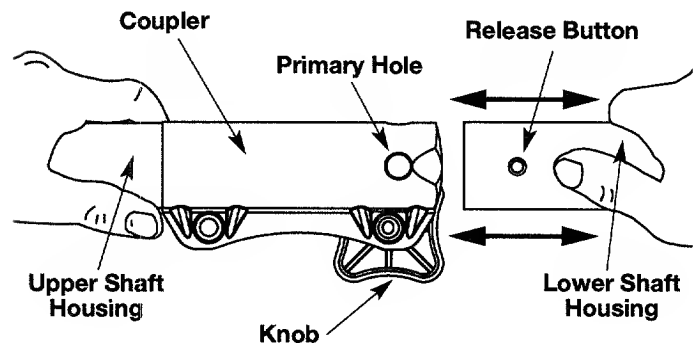


Fig. 2

3. Turn the knob clockwise to tighten (Fig. 3).



CAUTION: Lock the release button in the primary hole (Fig. 2) and securely tighten the knob before operating this unit.

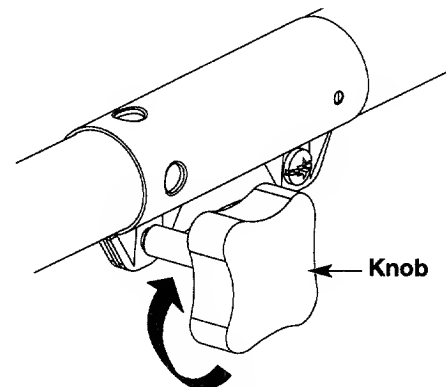


Fig. 3



CAUTION: The snow thrower attachment with the coupler system is to be used in the primary hole only. Using the wrong hole could lead to personal injury or damage to the unit.

OPERATING INSTRUCTIONS

SPECIAL COLD WEATHER STARTING INSTRUCTIONS



WARNING: To aid starting the two-cycle or four-cycle gasoline powerheads in cold weather, the unit should be stored in an area with the temperature above 40°F (4.4° C).

Refuel and store the gasoline powerhead in an area free of potential vapor ignition sources such as open flames (pilot lights) or electrical sparking devices (switches, electric motors).

OPERATING THE SNOW THROWER

1. Squeeze the power trigger on the powerhead to start the rotor. The depth and weight of the snow governs the forward speed. Refer to the operator's manual of the powerhead for further instructions.
2. Do not tip the snow thrower to self-propel. Push the snow thrower so that unit rides on the scraper.

DISCHARGE DIRECTION ADJUSTMENT

Snow may be discharged to the left, straight forward, or to the right.

To change the direction, use the following instructions:

1. Firmly grasp handle of discharge directional control and pull up. This releases the rod, which is spring-loaded, from the current discharge direction slot and allows free movement (Fig. 4).

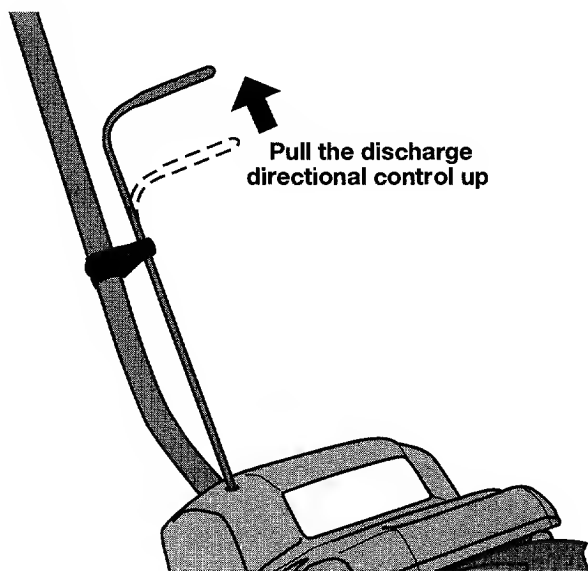


Fig. 4

2. Turn the discharge directional control to the left, center, or right, depending on which direction you want to throw the snow (Fig. 5).

NOTE: From the center position, the discharge directional control turns 45 degrees only in either direction (left or right). Do not force.

View of snow thrower top
looking down on discharge directional control

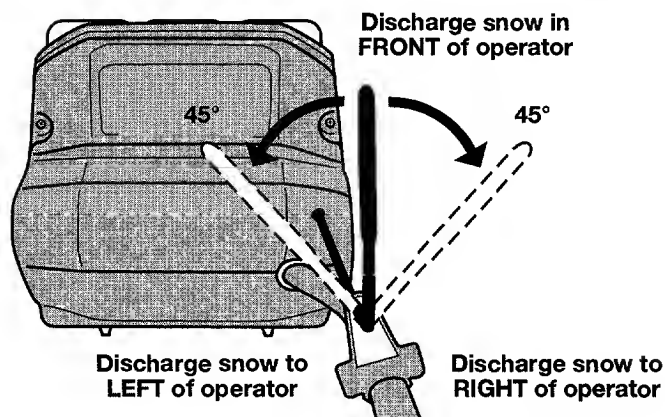


Fig. 5

3. Release discharge directional control into the discharge direction slot to secure position of snow throwing desired.

NOTE: Make sure discharge directional control is securely positioned in direction slot and cannot rotate freely.

TIPS FOR BEST SNOW THROWER RESULTS

4. For the most efficient snow throwing, keep the vanes parallel, throw snow downwind, and slightly overlap each swath (Fig. 6)
5. Hold the unit by the handle and use a swinging or sweeping motion when cleaning steps or deep drifts.



Fig. 6

MAINTENANCE AND REPAIR INSTRUCTIONS

INSPECTING/REPLACING THE DRIVE BELT

When servicing the snow thrower use only original MTD replacement parts. Inspect the drive belt once a year or every 50 hours of operation, whichever comes first, for wear. If the drive belt needs to be replaced, use the following instructions.

1. Remove the flange lock nut from the belt case cover with a wrench or nut driver (Fig. 7).
2. Remove the seven (7) screws from the belt case cover using a #T20 Torx bit or flat blade screwdriver (Fig. 7).

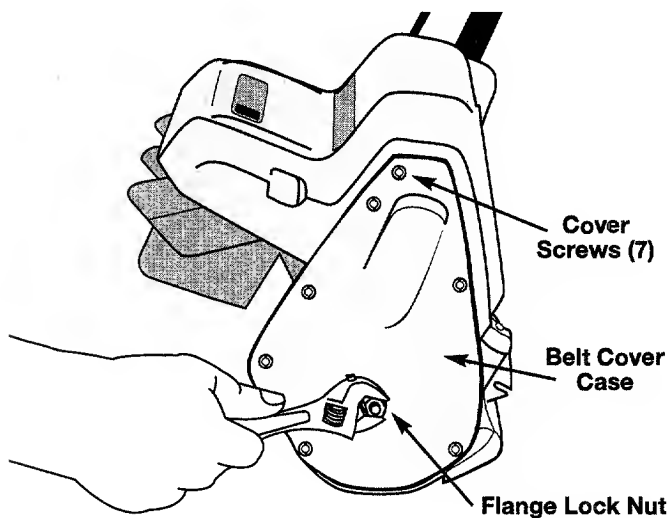


Fig. 7

3. Pull the belt tensioner (idler arm) away from the drive pulley. Remove the damaged or broken belt from the driven pulley and drive pulley inside of the housing (Fig. 8).
4. Loop the new belt around the drive pulley and driven pulley (Fig. 8). Pull the belt tensioner (idler arm) away from the drive pulley to install the belt around the drive pulley.

NOTE: Make sure the washer is still in place on the driven pulley shaft prior to reinstalling the belt case cover (Fig. 8).

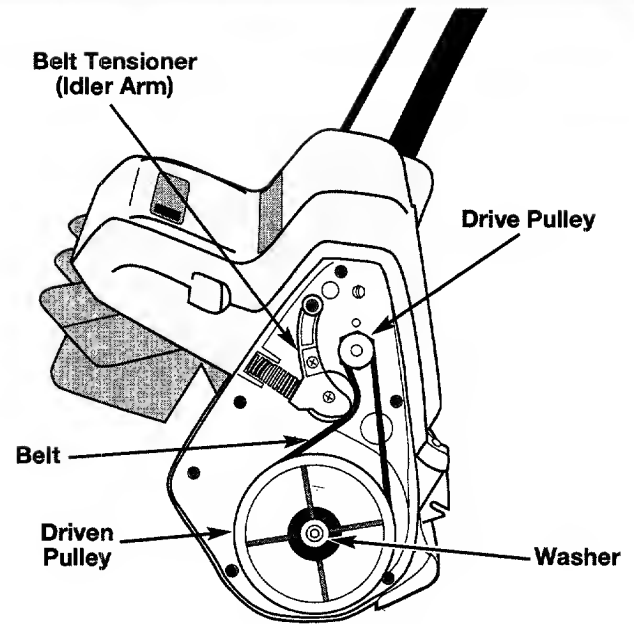


Fig. 8

5. Reinstall the cover with the seven (7) screws. To make installation easier, place the narrow part of the cover into the recess of the housing. Install the top two screws, then push the rest of the cover down into the recess and over the rotor shaft. Torque all seven (7) screws to **18-23 in•lb (2.0-2.5 N•m)**.
6. Install the flange lock nut. Torque the nut to **80-100 in•lb (9.0-11.2 N•m)**.

NOTE: If the flange lock nut is damaged, do not replace it with a standard nut. Replace only with an original MTD replacement part.

MAINTENANCE AND REPAIR INSTRUCTIONS

REPLACING THE SCRAPER

Use only original MTD replacement parts.

1. Place snow thrower on the ground or on work bench. Position unit so vanes and rotor are facing up (Fig. 9).
2. Beneath the rotor, locate and remove the three (3) screws securing the scraper to the housing using a #T20 Torx bit or flat blade screwdriver (Fig. 9).
3. Remove the scraper and discard appropriately.
4. Reinstall the three (3) screws to secure new scraper to the unit. Torque the screws to **25-30 in•lb (2.8-3.3 N•m)**.

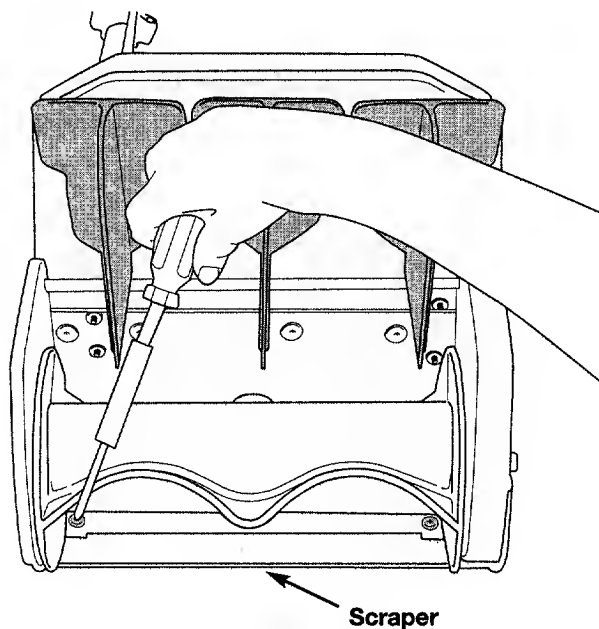


Fig. 9

MAINTENANCE AND REPAIR INSTRUCTIONS

STORAGE

- Check unit before storage to be sure the equipment is in safe working condition.
- Remove the residue ice or snow from the rotor by briefly running the unit out of the snow.
- Stop the engine or motor.
- Store the snow thrower indoors, in a dry and locked place, out of the reach of children.
- Maintain or replace safety and instruction labels, as necessary.

For gas powerhead units:

- Allow the unit to cool before storing in any enclosure.
- Drain fuel from unit. Never store the unit with fuel in the fuel tank inside a building where ignition sources are present such as hot water and space heaters, clothes dryers, etc.

TRANSPORTING

- Allow the unit to cool before transporting.
- Secure the unit while transporting.

For gas powerhead units:

- Drain fuel from unit.
- Tighten fuel cap before transporting.

ACCESSORIES/REPLACEMENT PARTS

Shoulder Strap	.....	.682075
Scraper	.....	.731-2557
Drive Belt	.....	.754-0633
Flange Lock Nut	.....	.712-3004A

Use only original MTD replacement parts.

SPECIFICATIONS

SNOW THROWER ADD-ON

Unit Weight (Add-On only)	.....	9.2 lbs. (4.17 kg)
Snow Depth (maximum)	.....	6-inches (.152 meters)
Cleared Path Width	.....	12-inches (.305 meters)

MANUFACTURER'S LIMITED WARRANTY FOR:

TrimmerPlus®

The limited warranty set forth below is given by MTD SOUTHWEST INC ("MTD") with respect with new merchandise purchased and used in the United States, its possessions and territories.

MTD warrants this product against defects in material and workmanship for a period of two (2) years commencing on the date of original purchase and will, at its option, repair or replace, free of charge, any part found to be defective in material or workmanship. This limited warranty shall only apply if this product has been operated and maintained in accordance with the Operator's Manual furnished with the product, and has not been subject to misuse, abuse, commercial use, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water, or damage because of other peril or natural disaster. Damage resulting from the installation or use of any accessory or attachment not approved by MTD for use with the product(s) covered by this manual will void your warranty as to any resulting damage.

This warranty is limited to ninety (90) days from the date of original retail purchase for any MTD product that is used for rental or commercial purposes, or any other income-producing purpose.

HOW TO OBTAIN SERVICE: Warranty service is available, WITH PROOF OF PURCHASE THROUGH YOUR LOCAL AUTHORIZED SERVICE DEALER. To locate the dealer in your area, please check for a listing in the Yellow Pages or contact the Customer Service Department of MTD SOUTHWEST INC by calling 1-800-345-8746 or writing to 550 N. 54th Street, Chandler, Arizona 85226 or if in Canada call 1-800-668-1238. No product returned directly to the factory will be accepted unless prior written permission has been extended by the Customer Service Department of MTD SOUTHWEST INC.

This limited warranty does not provide coverage in the following cases:

- A. Wear items - Bump Knobs, Outer Spools, Cutting Line, Inner Reels, Starter Pulley, Starter Ropes, Drive Belts
- B. MTD does not extend any warranty for products sold or exported outside of the United States of America, its possessions and territories, except those sold through MTD's authorized channels of export distribution

MTD reserves the right to change or improve the design of any TrimmerPlus® Product without assuming any obligation to modify any product previously manufactured.

No implied warranty, including any implied warranty of merchantability or fitness for a particular purpose, applies after the applicable period of express written warranty above as to the parts as identified. No other express warranty or guaranty, whether written or oral, except as mentioned above, given by any person or entity, including a dealer or retailer, with respect to any product shall bind MTD. During the period of the Warranty, the exclusive remedy is repair or replacement of the product as set forth above. (Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.)

The provisions as set forth in this Warranty provide the sole and exclusive remedy arising from the sales. MTD shall not be liable for incidental or consequential loss or damages including, without limitation, expenses incurred for substitute or replacement lawn care services, for transportation or for related expenses, or for rental expenses to temporarily replace a warranted product. (Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.)

In no event shall recovery of any kind be greater than the amount of the purchase price of the product sold. Alteration of the safety features of the product shall void this Warranty. You assume the risk and liability for loss, damage, or injury to you and your property and/or to others and their property arising out of the use or misuse or inability to use the product.

This limited warranty shall not extend to anyone other than the original purchaser, original lessee or the person for whom it was purchased as a gift.

How State Law Relates to this Warranty: This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

To locate your nearest service dealer dial 1-800-345-8746 in the United States or 1-800-668-1238 in Canada.

MTD SOUTHWEST INC

550 N. 54th Street
Chandler, AZ 85226 U.S.A.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

FOR QUESTIONS CALL 1-800-345-8746 IN U.S.

OR 1-800-668-1238 IN CANADA